

## REMARKS

In the August 7, 2006 Office Action, the Examiner noted that claims 1-19 were pending in the application and were rejected under 35 USC § 103(a). In rejecting the claims, U.S. Patents 6,233,471 to Egger et al. (Reference A in the November 17, 2003 Office Action) and 6,289,342 to Lawrence et al. (Reference B in the January 4, 2005 Office Action) were cited. Claims 1-19 remain in the case. The Examiner's rejections are traversed below.

The claims continue to be rejected over the same combination of Egger et al. and Lawrence et al. used in the January 4, 2005; June 28, 2005; and January 12, 2006 Office Actions. In the Response to Arguments it was explained that the words in the claims and prior art were being interpreted broadly enough to support the rejection and cited "col. 13, lines 40 *et seq.*" which presumably includes column 14 of Egger et al. where the word "patterns" is used.

### Request for Examiner Interview

Based on the statements in the Response to Arguments, Applicant understands that the issue is that the Examiner is interpreting the claims more broadly than intended and interpreting the prior art in a manner that Applicant believes is contrary to the meaning of the words to one of ordinary skill in the art. This Amendment includes amendments to the independent claims reciting additional details disclosed, for example, at page 25, line 25 to page 27, line 19; page 31, lines 18-22 and page 34, line 11 to page 35, line 10, in an effort to present claim language that will not be interpreted so broadly as to read on the significantly different teachings of Egger et al. and Lawrence et al.

The Examiner is respectfully requested to contact the undersigned by telephone to arrange an Examiner Interview prior to issuance of another Office Action to discuss what further changes, if any, are needed to avoid the excessively broad interpretation that has been used. The discussion of the differences between the invention and the prior art, as represented by Egger et al. and Lawrence et al., from the Amendment filed in response to the January 12, 2006 Office Action is repeated below with modification to reference the August 7, 2006 Office Action and the claims as currently amended. Hopefully, this will aid in the process of finding claim language that will be allowed as a result of the Examiner Interview.

### Interpretation of Prior Art

In the third paragraph on page 13 of the August 7, 2006 Office Action, it was asserted that "col. 13, lines 40 *et seq.* [of] Egger et al., discloses that textual objects include words,

phrases, paragraphs, or portions of other full textual objects. These full textual objects are then related to one another through a myriad of 'patterns'." In the January 12, 2006 Office Action, column 14, lines 21-26 of Egger et al. was specifically cited as support for this statement. As noted in the previous Amendment, column 14, lines 21-26 of Egger et al. states

[a]ny two textual objects may be related to each other through a myriad of "patterns." Empirical research demonstrates that eighteen patterns capture most of the useful relational information in a cross-referenced database 54. A list of these eighteen patterns, in order of importance, follows:

Following this quoted text in Egger et al. are eighteen examples of "patterns", all of which only indicate the route taken in pointing from one reference to another. Nothing has been cited or found in Egger et al. to suggest broadening the meaning of "patterns" beyond the routes taken from one textual object to another, as in the 18 examples.

The third paragraph on page 13 of the August 7, 2006 Office Action ends with the statement that "[t]hese textual (i.e., character string) patterns are indexed and matched to corresponding textual objects based upon their degree of relatedness to one another." No specific support in Egger et al. was cited for this statement. Applicant understands this sentence as asserting that Egger et al. discloses that character string patterns are indexed based on the degree of relatedness between textual objects that correspond to the character string patterns. If the intent was to assert that somewhere in Egger et al. there is a disclosure that is different than that quoted in the preceding paragraph that is relevant to the claimed invention, at the requested Interview, the Examiner is respectfully requested to identify with specificity the portion(s) of Egger et al. that support the statement at the end of the third paragraph on page 13 of the August 7, 2006 Office Action.

If there is no more relevant portion of Egger et al., the Applicant maintains the position that, as discussed in the previous Amendment, Egger et al. merely teaches eighteen different ways of recording relationships between textual objects, where all of the relationships are "citations" which are defined as "explicit references to other textual objects" (column 13, line 54). Nothing was specifically cited in Egger et al. that teaches or suggests a "correspondence table indicating correspondence between contexts of character strings and reference reasons" (claim 1, lines 2-3). As discussed above and in the previous Amendment, the only teaching found in Egger et al. in what was specifically cited in the January 12, 2006 Office Action (but not in the August 7, 2006 Office Action) with respect to "patterns," was eighteen different ways that references can cite one another. No suggestion has been found in column 13, lines 40 *et seq.* of Egger et al. that the "patterns" represent "contexts of character strings and reference reasons" as now recited in claim 1.

In rejecting claim 1, it was also asserted that column 6, lines 34-37 of Lawrence et al. discloses that the "context may contain *reasons for citation* by a referring document such as a brief summary of the paper, another author's response to the paper, or a subsequent work which builds upon the original article" (Office Action, page 4, lines 9-11, emphasis in original). However, all that is disclosed at this portion of Lawrence et al. is that "it is possible to display the context of how the paper is cited in subsequent publications" (column 6, lines 34-36). While this may be useful to the user, it does not suggest that the system is or could be modified to be capable of **identifying** "reference reasons" for citations, so that the system could serve as a "reference reason identifying apparatus" (claim 1, line 1) or that Lawrence et al. teaches or suggests "a reference feature/reference reasons correspondence table indicating correspondence between contexts of character strings and reference reasons" (claim 1, lines 2-3).

Furthermore, claim 1 recites "the reason including at least one of answer, application, basic, contraposition, human, related work, review, software, technique, weak correlation and similar" (claim 1, lines 13-15). These examples of reasons can be found at pages 32-33 of the specification. It is noted that this portion of the specification defines "review" as related to a document "cited in order to introduce the review of a specific field" (specification, page 33, lines 10-11), not a document that is reviewing another document. It should be clear that storage of information to enable "display [of the] context of how the paper is cited in subsequent publications" as taught by Lawrence et al. is not related to or suggestive of identifying or storing information corresponding to any of the reasons listed in claim 1 since the previous Amendment.

Claim 1 also has been amended to recite "obtaining a context of an extracted character string by performing language analysis of the extracted character string" (claim 1, lines 9-10). Nothing has been cited or found in Egger et al. and Lawrence et al. that teaches or suggests such language analysis.

For the above reasons, it is submitted that claim 1, as well as claims 2-3 which depend therefrom, patentably distinguish over Egger et al. and Lawrence et al.

Claims 4, 5, 10 and 12-18 have been amended to recite limitations similar to those quoted above from claim 1. Therefore, it is submitted that claims 4, 5, 10 and 12-18, as well as claims 6-9 and 11 which depend therefrom, patentably distinguish over Egger et al. and Lawrence et al. for the reasons set forth above with respect to claim 1.

Claim 19 has been amended to recite "storing pattern information including numeral patterns and indicating chapter numbers" (claim 19, lines 5-6). Nothing has been cited or found

in Egger et al. and Lawrence et al., that teaches or suggests numeral patterns or chapter numbers as now recited in claim 19. As noted above, Egger et al., merely teaches recording how documents cite one another.

Claim 19 also has been amended to recite

searching the document data for a pattern which matches one of the numeral patterns stored in said first pattern data list storage device, checking whether numerals contained in searched patterns increase consecutively as the document data are searched, and extracting information about a position where the referred document is cited in the document data by searching the document data for a pattern which matches one of the character string patterns stored in said second pattern data list storage device if the numerals increase consecutively

(claim 19, lines 10-16). Nothing has been cited or found in Egger et al. and Lawrence et al., that teaches or suggests these operations. Therefore, it is submitted that claim 19 patentably distinguishes over Egger et al. and Lawrence et al. for all of the reasons set forth above

### Summary

It is submitted that the references cited by the Examiner do not teach or suggest the features of the present claimed invention. Thus, it is submitted that claims 1-19 are in a condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: December 7, 2006

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